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ABSTRACT

To examine the durability of educational changes, researchers studied the school-related factors that promote or hinder the maintenance of classroom instructional changes beyond the initial period of change implementation. A brief review of the literature on change durability also reveals a paucity of research on the subject. The researchers gathered qualitative data on 14 elementary, junior high, and high schools in a variety of urban, suburban, and rural settings during a two-year period after the implementation of instructional changes. Using fieldwork methods that included observation and formal and informal interviews, they examined the nature of the implementation, the school factors or contingencies, critical post-implementation events, and the continuation status of the changes. Their data indicate that the most important factors promoting continuation are teacher incentives (from administrators, other teachers, and students) for making the changes, revision of the curriculum guide and other school rules governing instructional behavior, and assessments of the effectiveness of the changes. (Author/RW)

SCHOOL CONTINGENCIES IN THE CONTINUATION OF PLANNED CHANGE*

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School Contingencies in the Continuation of Planned Change

What happens to changes in a school's instructional program once they are implemented? Are they readily retained? Or, are they casually discarded once the attention of curriculum developers, outside consultants, district curriculum coordinators, and building administrators shifts elsewhere? One is likely to be discouraged if the literature on educational change is consulted for answers. Although schools are frequently criticized for their fadist behavior (i.e., their hypochondriacal tendency to seize a highly-touted remedy only to replace it with the next miracle cure that comes along), few systematic examinations of the persistence of change in schools have been conducted.

This paper reports on an exploratory study intended to illuminate some of the school-related factors that may promote or hinder the extent to which changes are continued beyond an initial period of implementation. The central theme of the paper is that once formal school improvement activities end, so will most of the new practices unless (1) a school is organized such that a continued flow of incentives and encouragement are available to those making changes or (2) corresponding changes are made in the rules and guidelines governing instructional behavior.

The first section of the report is a discussion of the limited literature concerning the durability of changes. Second, the research procedures and characteristics of the schools studied are described. Next, findings are presented. Finally, an initial framework for understanding how aspects of a school's context affect continuation is drawn from the data.

Research on the Continuation of Change

Continuation is that period in a change cycle after new practices have been implemented. From the research available, the most useful point to separate implementation from continuation is when special external resources allocated specifically to the change effort are removed, i.e., when the patient is taken off a life support system and must maintain critical functions independently of special assistance. For example, Berman and McLaughlin (1977) and Rosenblum and Louis (1981) noted a drop in the amount of change when federal funds were withdrawn. Thus, the removal of outside support seems to be a particularly traumatic event for change durability.

Miles (1964) provides another way to view the point at which implementation becomes continuation. He labels special projects involving a subset of organizational members as "temporary systems." That is, project participants constitute a collectivity of people who are called together for a special purpose, are expected to disband at some definite point in the future, and, through the pursuit of a joint task, take on the characteristics of group life. Continuation, then, can be conceived of as the point at which a temporary system to promote change disbands and the permanent system must assume responsibility.

What happens to change when a system is on its own to support it? Rosenblum and Louis (1981) found that in a school district where implementation goes well, so does continuation. While they did note a drop in the amount of change when federal assistance ended, schools which implemented relatively more than other schools also continued more (although there seemed to be a reduction in the disparity among the schools over time).

Because most of the research on change in the past decade has been on implementation, this finding should be heartening to curriculum developers, change agents, and other researchers; the understandings they have developed about implementation will serve them well in understanding continuation.

However, other research on organizations suggests that this close link between implementation and continuation is by no means assured. Hage and Aiken (1970) and Yin et al. (1978) discovered that special attention had to be given to the "routinization" of changes to insure that they lasted. For example, new practices had to be codified into rules governing action, be included in training activities for newcomers, successfully survive budget reviews, and outlast the tenure of the individuals who were intimately involved in planning the innovation. Additionally, Berman and McLaughlin (1978) noted that if these new practices actually replaced existing practices than they were more likely to continue; the prospects for "add-on" activities were lower. Should such routinizing events not occur, then the chances for change to persist are reduced.

Glaser (1981), in reviewing the literature on the durability of change in organizations, acknowledges similar means for promoting continuation. He also notes several others that have a slightly different tone, related to the kinds of interaction found in an organization. In particular, he says that opportunities for staff to discuss changes once implemented, to provide feedback to one another on the success of certain changes, and to receive continuing reinforcement for using new practices have all been shown to be important facilitaters of change durability. Glaser (1981: 182) concluded with data from his study that "Perhaps the most important

single finding of our research is that promoting durability requires personal involvement on the part of one or more persons genuinely interested in making the change last so long as it appears worth while..."

Thus, two categories of post-implementation organizational events have been shown to be important influences on the extent to which implemented changes are continued: (1) the provision of opportunities for discussions about and reinforcement for continuing new practices and (2) the routinization of changes in operating procedures. To these two categories of events discussed above, a third has to be added: assessments of the effectiveness of changes. As Rogers (1962) observes, not all changes should be continued. Presumably, some changes will prove to be successful means for assisting attainment of desired goals and others will not. To the extent that less useful changes are discovered, they likely will be discarded. Thus, such assessments are also important events affecting continuation.

However, the cumulative research on implementation in schools warns that knowing that certain critical events must take place does not insure their occurrence. In fact, one of the major lessons from the past decade is that there are important contingencies in a school's context which can stall, stop, or speed up change implementation, often in spite of the intentions of intelligent and committed individuals (e.g., Berman, 1981). Thus, research on the persistence of change must pay careful attention to characteristics of schools which can facilitate or block the occurrence of these important events after implementation.

The above issues drive the discussion of data from this study. The intent is to identify critical events that affect continuation and the school-related characteristics upon which their occurrence is contingent.

This will help generate an initial understanding about why continuation does or does not occur. Knowledge about continuation at present falls far short of providing a priori hypotheses to test.

Research Methods

The data reported in this paper were collected as part of a three-year exploratory study of change in 14 schools. The schools were attempting to improve their instructional programs in either basic skills, career education, or citizen education with external assistance from Research for Better Schools (RBS), a private non-profit educational laboratory. The schools arranged for the time for their staff to participate in the projects (five managed to obtain special funding for this from the state education agencies) and were responsible for final decisions about which changes to make; RBS provided, at no cost, resource and training materials and the time of one or more field agents and numerous technical staff. Thus, RBS offered intensive assistance whereas the schools provided a place for RBS to develop approaches to change in the three fields.

Data Collection and Site Schools

In the first year of the study, the initiation of the change projects was examined in all 14 schools. Then, intensive field work, involving observation and formal and informal interviewing, was done in five of the schools to get rich data on the intricacies of implementing change. During this time activities at the other schools were tracked through occasional school visits and interviews to see if similar issues were arising. The third year of the study was devoted largely to conducting interviews in all 14 schools to determine the fate of changes after formal project activities

had ended. In two of the schools, such activities had not ended by this time; in the remainder, 12 to 24 months had elapsed since the schools had received special external assistance.

The research intent was to interview as many teachers and administrators in a school as possible. The number of people interviewed varied widely, from 100 percent in one school to only 2 percent in a school where most of the staff with knowledge about the project had departed. Of course it should be remembered that considerable field work had been done in all of the sites prior to the interviews. Thus, the interviews were not the sole source of data about relevant issues.

The third-year interviews themselves were open-ended. Staff were asked to describe (1) changes they had personally made, (2) changes they were aware that others had made, (3) changes in school procedures, and (4) the extent to which any of these changes were currently in use. Thus, interviewees responded as subjects and informants. When discrepancies among interviewees in a school occurred, field data collected previously were consulted and, if necessary, additional staff at a site were interviewed to help resolve the matter.

Figure 1 lists the schools and some of their characteristics (all school names are pseudonyms). Briefly, there were three high schools, six junior highs, and five elementary schools. They operated in a mix of urban, suburban, and rural communities and represented a wide range of sizes and student populations.

Figure 1 about here

The schools were those which were approached by and agreed to work with staff in the three content areas from RBS. RBS' selection criteria varied. For example, in career education, schools were identified because they had previously applied for special state funds for programs in the area; in citizen education, schools were sought which had evidenced acute social problems. Thus, the schools were not selected in a way that allowed generalizability to a larger population with any degree of confidence. However, the sample represented an invaluable mix of schools for helping to generate an initial understanding of the change process.

The "Measurement" of Implementation and Continuation

The data in this study were collected through qualitative methods. While such data are certainly amenable to being represented quantitatively, there are numerous other ways the results of qualitative data analysis can be displayed (e.g., Miles 1980). For the purposes of this paper, descriptive representations of the nature of implementation and continuation were used.

The implementation of change has been measured in a variety of ways. For example, Rosenblum and Louis (1981) assessed both the "quantity" of change (i.e., the number of organizationally relevant subunits which changed) and the "quality" of change (i.e., how widely changes departed from existing practices). Others have examined different levels of change (e.g., Hall & Loucks, 1977; Larsen & Werner, 1981). In this study, implementation was to be a baseline against which to compare the state of

affairs after a period of time had elapsed. In order to capture the rich array of change and to be able to trace the fate of particular changes, descriptions of project-related changes in each school were prepared. Primary emphasis was on depicting the quantity of change within a school, although some aspects of the quality of change were also noted. Included in the descriptions were only observable changes in practices and procedures. Many staff acknowledged alterations in their awareness of certain issues; but unless a new awareness was translated into action, it did not become a part of this analysis. Thus, the implementation descriptions represented a snapshot of the schools at the point when formal activities ended.

Two different measures of continuation have been used in the literature. Rosenblum and Louis (1981) were concerned with the amount of continuation in a school relative to other schools. This approach highlighted the importance of pre-implementation factors affecting change because, understandably, the largest contributor to explaining variance in the amount of continuation was the amount of implementation. On the other hand, Glaser (1981) attempted to explain why an innovation declined or was retained within an organization. This approach focused his explanation on post-implementation factors. This latter approach was adopted in this study, especially because of the few opportunities researchers have had to examine what happens after implementation. Thus, the fate of the changes listed in the descriptions of implementation were assessed after 12 to 24 months had elapsed; and the concern was with explaining decline or maintenance of change within a school.

Critical Post-Implementation Events and the Continuation of Change

Table 1 depicts the changes made during implementation of the RBS projects and the changes remaining after a period of time had elapsed. Of the 12 schools where more than 12 months had passed between the end of formal project activities and the continuation interviews, seven schools had essentially maintained changes at the same level and five schools had noticeable drops. In one of the two schools where formal activities were still in progress, there were already strong indications that fewer changes would be continued than were implemented.

Table 1 about here

It should be noted in Table 1 that changes in procedures, schedules, and formal curriculum guides tended to be retained; declines occurred in changes in classroom practices. This meant that schools which had difficulty altering much more than a few peripheral procedures like Urban and Suburban were credited as maintaining the number of changes initially made. On the other hand, schools that achieved greater implementation among staff members, like Neighbortown and Green Hills, exhibited reduced continuation even though the amount of change remaining was greater than that of some other schools. However, not all schools with high implementation experienced declines (e.g., Smalltown Middle, Smalltown Elementary, and Southend), and not all less ambitious schools were able to maintain the few changes they made (e.g., Riverside and Farmcenter). Thus, lower continuation was not simply an artifact of having attempted more change. Other factors were important. This section discusses the contributions of the

availability of incentives, curriculum guides, and assessments of change effectiveness on the continuation of change.

Incentives in Temporary and Permanent Systems

Formal project activities constituted what Miles (1964) calls a temporary system. That is, the projects possessed organizational properties of their own and were acknowledged as having a limited duration. In many cases, these temporary systems operated very differently from the ways in which the schools, or permanent systems, operated. For example, instead of relying on students for most of their human contact in the harried atmosphere of the classroom, teachers were able to sit in relatively uninterrupted settings to discuss professional matters; instead of making decisions about a single classroom individually, they became involved in joint planning for the entire school; and instead of having few, if any, adult sources of feedback and encouragement about their teaching performances, they worked in a supportive environment in which commendations for action were frequent from peers, outside experts, and school administrators.

These temporary systems were still operating when the first implementation efforts were made. As a result, teachers received a steady stream of queries about how the new activities were going, including frequent interviews from researchers. In addition, they occasionally had the opportunity to share their initial reactions at in-service meetings, at special conferences which included project participants, and to outsiders interested in the new programs. This first flush of implementation was a heady experience for many of the participants.

It should not be surprising, therefore, that the most critical factor affecting the extent to which new classroom practices were continued was the availability of incentives, or "any prospective source of gratification" (Sieber, 1981: 118), in a school once the temporary system dissolved. Because teachers typically work in isolated settings with very few available rewards (Lortie, 1975), the switch from a temporary system to the permanent one as the major arena for action can be traumatic, and problematic for the continuation of change. Such was the case in the RBS schools. Where incentives, positive or negative, were available to staff to maintain changes, the changes on the whole were continued; where such incentives were not available, the amount of change declined.

There were three sources of incentives: administrators, other teachers, and students. By far, the most important source for maintaining change at the school level was the building administrator. At Smalltown Elementary, Smalltown Middle, Southend, and Oldtown there was at least one administrator in the building who exhibited a keen interest and played an active part in seeing to it that changes continued. In the first three schools the administrators not only conveyed this interest in conversations with faculty but also included on formal evaluations their observations about staff progress toward system goals the projects addressed. At Smalltown Middle this use of evaluations was only with the English department (which had received formal training); in the other two schools, non-project teachers were held accountable for progress toward the same goals as project teachers. Non-project teachers were provided project-related materials and, not surprisingly, used them to a considerable extent. As one administrator said, "(By using evaluations) I may have put

some of them in the position where they had to do something." Thus, the administrators coupled positive incentives (recognition for use of new practices) with negative ones (the threat of a lowered rating on evaluations for non-use) and effectively induced a large number of project and non-project staff to continue changes. At Oldtown the administrator used more informal and positive incentives in support of project changes, and only with project participants. Strong administrative incentives were also apparent at Patriot and Bigtown, and indications were that changes deemed effective would be continued at these schools as well.

Post-implementation administrative incentives were noticeable by their absence at Neighbortown, Farmcenter, Middleburg, and Green Hills. The Neighbortown principal believed that teachers preferred to be left alone to do their work and thus did not discuss changes with them even though the principal professed a strong commitment to the changes. The teachers, on the other hand, noted that had someone bothered to ask them occasionally how "things were going," they likely would have continued many of the activities. One teacher stated that the activities required some additional work and in the absence of positive incentives like recognition or a more negative incentive such as an administrative mandate "I stuck with what was comfortable for me."

The principal at Farmcenter was defined as a "joiner" by several staff members. Each year the school seemed to become involved in a new project, and during the year following implementation of the RBS project, staff in-service time was shifted to an entirely unrelated activity. Staff interpreted this to mean that the former project was no longer a priority and subsequently discontinued the classroom practices devised for it. At

Middleburg, the principal also replaced the RBS project with another one, and with similar results. At Green Hills, the principal who initiated the RBS project was transferred. The new principal continued project-related planning (without RBS assistance at the principal's insistence) but did not consult with nor involve the original RBS participants in this planning. Subsequently, several of these teachers reported a considerable drop in their enthusiasm for continuing changes.

The question arises as to why some building administrators continued to support changes actively while others did not. Certainly the answer is a complex combination of factors, but the data from this study suggest that adminstrators were not all that different from teachers. When sources of incentives were available to them to promote the changes, they did; when such sources were not available, they did not.

For example, the two Smalltown schools and Southend were in the same district, and the projects addressed the most pressing issue the superintendent felt the district faced: improving basic skills achievement. The central office closely followed the schools' progress toward attaining this goal. Not coincidentally, administrators made special efforts to promote the changes developed in the RBS projects intended to improve student performance. At Oldtown, just as the administrator who coordinated the RBS project felt that no more time could be allocated to promoting these changes because of other pressing demands, the state education agency issued regulations for graduation requirements in career education. Project-related changes provided the simplest way for the entire school to meet these requirements. Thus, the district directed the school to pursue this approach with all faculty, and the administrator was able to reallo-

cate time to this work. The new principal at Green Hills actually had little interest in continuing RBS project activities and, in fact, dismissed RBS from providing technical assistance to the school. However, the principal did devote considerable staff time to related activities because of a belief that the district had committed itself to the school board to develop a program in the area.

At both Bigtown and Patriot, the districts adopted the RBS approach for use district-wide. Of course, this development did not insure that implementation would follow, but by the end of the study it was evident that building administrators were planning to spend much of their time supporting this initiative.

Administrators at the other schools were not nearly as active in encouraging change after formal activities ended. However, this statement does not necessarily reflect administrative shortcomings. Instead, in the majority of the schools, it highlights the typical relationship that existed between building administrators and teachers. For the most part, teachers were left alone to perform their duties; administrators' time was consumed by budgeting, scheduling, and putting out the daily fires that frequent schools. Thus, teachers and administrators rarely had opportunities to discuss instruction, unless there was an additional pressure that compelled them to do so. Such a stimulus was not present in the schools where administrative incentives were rarely provided.

At Neighbortown, for instance, a district official actually reduced resources available to support project activities, even though the person had been an active and ardent participant in formal planning. The administrator explained that with tighter funds and the relatively low priority of

career education the considerable level of support for the project could no longer be justified. The official acknowledged, "We shot a mouse with an elephant gun." Subsequently, the principal adopted a wait-and-see attitude about promoting project-related efforts, and teachers assumed all of this meant that administrators had lost interest in the project. Thus, the centrality of the system goals the project addressed affected the allocation of resources to support change. This affected the building administrator's efforts to encourage change which, in turn, influenced teachers' retention of new practices.

A second source of encouragement was other teachers. Although in general most of the teachers in the study tended to work independently of one another, there were pockets within schools where the work of teachers was more integrated (Corbett, 1980). In these grades or departments, there was typically greater interaction among teachers. This situation enabled various kinds of information to flow more freely and provided greater opportunities for one to receive positive incentives (professional recognition from peers) for certain practices. In such subunits containing an RBS participant, project-related changes were often discussed and implemented by most of the teachers. Subsequent interviews revealed that these changes were also typically maintained long after implementation. To the extent changes were discontinued, it was because of lack of effectiveness rather than lack of encouragement.

At Smalltown Elementary and Southend, tightly knit subunits not only reinforced the administrative incentives available there but also effectively and quickly induced new teachers in the group to adopt similar changes. In schools without administrative encouragement such subunits

were the only source of adult recognition and enabled change to be continued through the development of a group commitment to the innovation. For example, at Neighbortown there was a department of five people which jointly planned courses, frequently taught the same courses, and evaluated the effectiveness of course activities in consultation with one another. Changes by one teacher, then, usually affected the others and, thus, were not made without the advice and consent of the group. Once such a change was made, it was adopted either by the entire group or by those who had similar responsibilities. However this phenomenon was rare; generally teachers in schools without supportive administrators suffered a considerable loss of attention at the end of formal activities. The continuation of change also suffered as a result.

The third source of encouragement to continue change was students. To the extent that teachers discontinued or continued activities solely because of their effectiveness, they did so as the result of overt student reactions. For example, at least three Patriot teachers discontinued a major change in their approach to student discipline because discipline problems had not appreciatively decreased after a year. Thus, even though the teachers were still receiving considerable encouragement from the principal and RBS, they did not allow this support to override the negative reaction of the students toward this particular change. Other changes were retained, so babies were not discarded with the bath water. At Neighbortown, one teacher was inclined to stop all of the activities the person had implemented during the project. However, because student response was very enthusiastic for one of the changes, the teacher decided to retain it even though it required considerable preparation time. It must be noted that

clearly positive or negative student responses to changes were infrequent, as students tended to not be particularly effusive about most classroom activities, new or old. Thus, this source of encouragement, as was the case with teachers, was rare.

Curriculum Revision as a Source of Continuity

By and large, the data from this study point to the availability of incentives as a critical ingredient in promoting the continuation of change. Presumably at some point, however, one would find that changes had become such a part of a teacher's routine that overt encouragement would no longer be as important. In fact, by this time, these practices would have probably become the highly resistant and obsolete targets of subsequent school improvement efforts.

An alternative to the use of incentives as a way to facilitate the use incorporation of change was the revision of curriculum guides. This was particularly effective for change involving specific instructional activities as opposed to changes in general teaching methods. New instructional activities required rearrangements of the use of class time. Either existing activities had to be replaced or shoe-horned into less time. Teachers were willing to make temporary adjustments for initial implementation but argued that they could not do so on a regular basis without complementary changes in the curriculum. Thus, in schools or subunits where there was a tight bond between what teachers taught and what was specified in the curriculum, the continuation of change was promoted by making appropriate revisions. In effect, old core practices were being replaced by new ones.

This approach was not unilaterally effective, however, because of differences in the bond between teachers and the curriculum across schools and across subunits within schools. For example, at Oldtown teachers were required to formalize in writing the activities they would use to help students meet state graduation requirements. Although teachers reported there was a generally blase attitude about covering district curricula among staff members, the state requirements were more compelling because teachers would be directly accountable to carry out what they wrote. Happily for the RBS project, related changes offered a ready-made solution for meeting one portion of the requirements. Similar commitments (although for differing reasons) to adhering to the curriculum were present in the English department at Green Hills, and the Social Studies departments at both Neighbortown and Suburban. In each case, formal changes in required content and activities helped insure that changes would continue.

Making such changes had an additional advantage: It helped soften the effects of position turnover. At schools like Riverside where a teacher was largely responsible for determining what occurred in the classroom, there was no assurrance that someone succeeding this person would continue changes. For example, when the teacher who served as the project coordinator was transferred to another school, Riverside lost its major advocate for the project. Interestingly, turnover was such a significant factor at this school that only two staff members and two students could be located that even recalled the names of RBS agents who assisted the project.

By incorporating changes into curriculum guides more continuity was possible. For example, the math representative on the project at Neighbortown prepared an outline for a course that was later taken over by another

teacher in the department. This second teacher had expressed no interest in the project and yet, because of unfamiliarity with the course's content, actually made as many changes as project participants. Similiarly, new teachers in Social Studies at Neighbortown and on one of the teaching teams at Smalltown Elementary almost unwittingly implemented project changes as they followed curriculum guides infused with project activities.

However, a close linkage between what teachers taught and what was prescribed in the curriculum was the exception rather than the rule. In most schools and subunits teachers exercised great flexibility in what they chose to teach. Even when it became apparent that curriculum revisions could be an effective way to promote the continuation of new practices, the people who were in the best position to instigate such revisions were often not members of the planning team or, worse, vocal critics of the project.

A Note on Effectiveness

Probably in any change project, participants initially intend for new practices to continue. Even in schools that adopted and discarded projects with alarming speed, participants expressed the hope that somehow the RBS project would enjoy a different fate. Ideally, the sole deterrent to this intent to continue would be when a practice has clearly demonstrated its ineffectiveness as a means to a desired goal. Yet, in the schools and subunits in this study where significant sources of incentives were unavailable, changes rarely received a long enough trial to make an assessment about their effectiveness. Thus, potentially beneficial practices went the way of less useful ones. Only in schools or subunits where there was enough support to continue change did teachers and administrators have the opportunity to collect and interpret evidence about the effects of changes

on student behavior and to determine if this indicated acceptable progress.

A Framework for Understanding Continuation

Figure 2 summarizes the relationships among the continuation of classroom changes, critical post-implementation events, and school contextual contingencies. Arrows drawn from one variable (or, more appropriately, category of variables) to another indicate the direction of effect between the two (e.g., allocation of district resources affects the provision of administrative incentives); arrows drawn from a variable to the mid-point of another arrow imply that the variable has a mediating effect on the relationship between the two variables the second arrow connects (e.g., incorporation of new practices into the curriculum can mediate the detrimental effects of staff turnover on continuation); the encircled signs along an arrow indicate the nature of the relationship between two variables.

Figure 2 about here

A caveat is necessary regarding the framework. The data reported in this study do not provide a test for the framework; they generated it. It remains for subsequent research to explore the theoretical statements more fully. However, the framework is consistent with previous research on continuation and moves beyond these findings by tieing critical post-implementation events to school characteristics upon which their occurrence is contingent.

First, Glaser (1981) noted the role of discussion, feedback, and rewards in promoting the durability of change. The data from this study suggest that opportunities to discuss and offer feedback about changes are embedded in the structure of an organization and that the primary function these opportunities serve is as a mechanism for providing incentives for certain practices. These incentives are essentially positive and informal ones in the form of recognition for special effort. There are more such opportunities in schools where teachers and administrators regularly encounter one another and where departments or grade level units have routine interactions. Thus, in these schools, greater opportunity to provide and receive incentives is available, thereby enhancing change durability.

The extent to which administrators supplied incentives to teachers to continue specific changes is contingent upon the importance of project goals for the system. A similar emphasis on the centrality of goals and durability can be found in both Berman and McLaughlin (1976) and Rosenblum and Louis (1981). In this study, its major impact was on the allocation of resources to support new practices. How time, money, and people were distributed indicated to building administrators the relative importance of certain activities and practices and affected how much attention administrators devoted to them.

Generally, these findings highlight the nature of system linkages as a factor in the change process. The tighter the bonds among teachers and between teachers and administrators, the more likely incentives for (or against) certain practices can be conveyed regularly. Thus, continuation is more likely when linkages are closer.

Second, several researchers have suggested routinizing change as a major facilitator of continuation (Hage & Aiken, 1970; Yin et al., 1978). In schools, classroom changes are best routinized by incorporating them into the curriculum, especially the curriculum devised by subunits whose actions it is to govern. Not only does incorporation induce teachers not involved in a project to make related changes but also it helps introduce new teachers to the practices, thus reducing the potentially negative effects of staff turnover. In this study, incorporation into the curriculum was ventured only in subunits where teachers had already demonstrated rather strict adherence to curriculum guidelines. These subunits also tended to be those that evidenced considerable integration among their members. Once again, this finding supports the notion of close linkages in a system as a promoter of continuation, in this case between the guidelines for instructional practice and actual practice.

Finally, changes were occasionally discontinued or continued based on the results of assessments of their effectiveness. (A zero is used in Figure 2 as the sign for the relationship between these assessments and continuation because they were not necessarily associated with higher or lower continuation. One of the major stimuli for teachers to make such assessments was feedback from students. The more feedback available, the more assessments were made. An important barrier to the occurrence of assessments was a district's adoption rate of new projects. When a district quickly and repeatedly turned its attention from one project to another, any one project was rarely in the limelight long enough to determine its effectiveness. Instead, continual adoption rearranged priorities

and, thus, affected which activities and practices administrators encouraged.

Conclusion

Of the three categories of critical post-implementation events, by far the most frequent and powerful was the provision of incentives, particularly by administrators. Opportunities for teachers to interact with one another regularly enough to be an effective source of incentives were rare except in a few scattered departments or grade level subunits. Clearly gratifying or discouraging student responses were even more rare. Given that most schools and subunits exhibited only the loosest of bonds among teachers, routinizing events related to the curriculum were also infrequent.

What this analysis suggests is that the persistence of change in schools is extremely problematic. It relies heavily on administrators being able to devote regular attention to encouraging staff to maintain newly implemented practices; and given the hectic nature of administrators' lives, this too is problematic. Without systematic and fairly radical changes in the organizational structure of most schools, the contextual contingencies which influence the occurrence of critical post-implementation events tend to favor their non-occurrence. Thus, schools may well deserve the criticism that they flit from fad to fad; but the blame is wrongly targeted if it is directed at the personality of educators, either individually or collectively. Instead, the rapid coming and going of change is deeply embedded in the ways schools are organized.

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Table 1. Implementation and Continuation.

SCHOOL	NATURE OF IMPLEMENTATION	NATURE OF CONTINUATION	ELAPSED TIME
Middleburg Elementary	8 teachers on planning team (out of 8) made classroom changes	Reduced emphasis from teachers	24 months
	Slight rescheduling of how special students handled	Schedule changes either not continued or too slight to notice	
Urban Junior High	No teachers made classroom changes		24 months
	Reorganization of student council	Continued	
	Revisions in discipline code	Continued	
	New awards/honor system	Continued	
Suburban Junior High	4 teachers on planning team (out of 4) made classroom changes	Basically the same, especially in social studies	24 months
	Several non-project social studies teachers made classroom changes	Continued as part of curriculum	
	Principal has new leadership skills	Continued	
	New curriculum in social studies	Continued	
	Student council changes	Continued	
Riverside Junior High	2 teachers on planning team (out of 3-6) made classroom changes	One teacher left but continued changes at new school; other teacher discontinued activities	24 months
	Increased meetings of Parents-Teachers	Meetings no longer held	

Table 1. Implementation and Continuation (continued)

SCHOOL	NATURE OF IMPLEMENTATION	NATURE OF CONTINUATION	ELAPSED TIME
Smalltown Middle School	4 teachers on planning team (out of 4) made classroom changes	Continued, with possible exception of one teacher	24 months
	4 non-project English teachers made classroom changes	Continued	
	Asst. Prin. made changes in evaluation procedures	Continued	
	Greater time allocated to language arts	Continued	
Smalltown Elementary	4 teachers on planning team (out of 4) classroom changes	2 left school; 2 continued changes	24 months
	Approximately half of remainder of staff made classroom changes	Continued, including new teachers on certain teams	
	Prin. and asst. prin. emphasize changes in discussions with teachers and in evaluation procedures	Continued	
Farmcenter Junior High	3-5 teachers on planning team (out of 5) made classroom changes	Teachers no longer using new practices	18 months

Table 1. Implementation and Continuation (continued)

SCHOOL	NATURE OF IMPLEMENTATION	NATURE OF CONTINUATION	ELAPSED TIME
Farmcenter (cont'd.)	New awards assembly	Continued	
	New teacher committees	Continued	
Southend Elementary	7 teachers on planning team (out of 7) made classroom changes;	Continued--two used ideas in a more abbreviated way	12 months
	3 non-project teachers made classroom changes	Continued	
	Prin. incorporated project themes into evaluation procedures	Continued	
Oldtown High School	2 teachers on planning team (out of 2) made classroom changes	Continued--less activities over time, but say will increase	12 months
	3 teachers who assisted workshop planning (out of 3) made classroom changes	Continued	
	14 teachers who attended a workshop series (out of 15) made classroom changes	Continued--some evidence of reduced emphasis among 3 or 4	
Bigtown	10 teachers who attended a workshop	Continued	12 months

Table 1. Implementation and Continuation (continued)

SCHOOL	NATURE OF IMPLEMENTATION	NATURE OF CONTINUATION	ELAPSED TIME
Bigtown High School (cont'd.)	series (out of 10) made classroom changes		
	District will use approach from project as district-wide emphasis		In progress
Neighbortown High School	6 teachers on planning team (out of 7) made classroom changes	3 continued; 3 dropped or reduced	12 months
	4 non-project teachers in social studies and 1 in math made classroom changes	Continued; one new teacher to social studies made changes	
	2 guidance counselors altered class scheduling procedures	Continued	
	Librarian collated special materials	Discontinued	
	New course started; 2 teachers given training	Continued	
Green Hills Junior High	6 teachers on planning team (out of 6) made classroom changes	Reduced emphasis; at least 1 or 2 dropped	12 months
	6 non-project teachers in two departments made classroom changes as result of post-RBS activity	Dropped in regular courses; added to electives	In progress

Table 1. Implementation and Continuation (continued)

SCHOOL	NATURE OF IMPLEMENTATION	NATURE OF CONTINUATION	ELAPSED TIME
Middletown Elementary*	14 teachers on planning team (out of 16) made classroom changes for both projects	Reduced emphasis; dropped more difficult changes	In progress
	Greater than 50 percent of rest of staff made changes in first project	Some reduced emphasis	
*in two RBS projects	Rearranged teacher planning times	Continued	
Patriot Elementary	4 teachers on planning team (out of 4) made classroom changes	Reduced or dropped one major change; kept others	In progress
	2 non-project teachers made classroom changes	Same as project teachers	
	Prin. made some alterations in evaluation procedures and in forms of lesson plans accepted	Continued	
	Scheduling changes for special students	Continued	
	District will use RBS approach for entire district		

NAME	LEVEL	NUMBER OF CLASSROOM TEACHERS	PERCENT OF STUDENT MINORITY	COMMUNITY SERVED	RBS PROJECT
Patriot	Elementary	18	95%	Small City	Basic Skills
Middleburg	Elementary	31	11%	Suburban	Basic Skills
Middletown	Elementary	22	21%	Suburban	Basic Skills
Southend	Elementary	13	20%	Rural	Basic Skills
Smalltown	Elementary	35	32.5%	Rural	Basic Skills
Smalltown	Middle	38	20.5%	Rural	Basic Skills
Urban	Junior High	77	61%	Big City	Citizen Education
Farmcenter	Junior High	43	19%	Small City	Citizen Education
Riverside	Middle	63	96%	Big City	Citizen Education
Suburban	Junior High	49	2%	Suburban	Citizen Education
Green Hills	Junior High	45	8%	Suburban	Career Preparation
Neighbortown	Senior High	49	0%	Rural	Career Preparation
Bigtown	Senior High	150	92%	Small City	Career Preparation
Oldtown	Senior High	141	55%	Small City	Career Preparation

Figure 1. The 14 Schools.

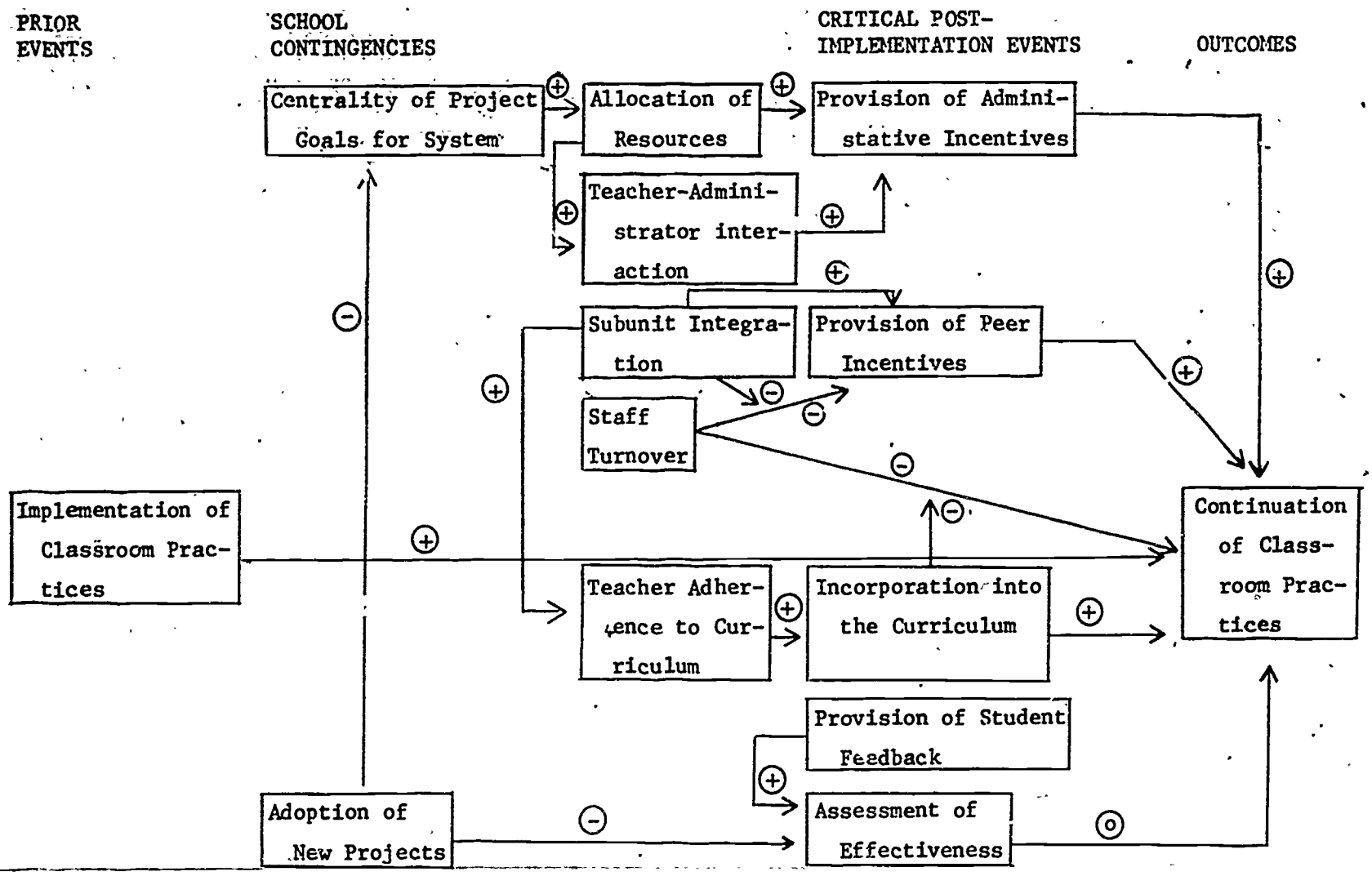

Figure 2. A Framework for Understanding Continuation